

Claims

[c1] What is claimed is:

1. A method for handling an unrecoverable error on a dedicated channel for a wireless device, the method comprising:

determining if the wireless device is in a CELL_DCH state;
determining if a layer one radio link failure has occurred;
in response to determining that the wireless device is in the CELL_DCH state and that radio link failure has occurred, performing radio access bearer (RAB) release steps to release radio bearers; and
in response to determining that the wireless device is in the CELL_DCH state and that radio link failure has not occurred, not performing the RAB release steps.

[c2] 2. The method of claim 1 further comprising the wireless device initiating a Cell Update procedure.

[c3] 3. The method of claim 2 further comprising:
in response to the wireless device initiating the Cell Update procedure, a Universal Terrestrial Radio Access Network (UTRAN) receiving a CELL UPDATE message from the wireless device;
in response to receiving the CELL UPDATE message, the

UTRAN composing a CELL UPDATE CONFIRM message comprising an information element (IE) "RLC re-establish indicator (RB2, RB3 and RB4)"; and
the UTRAN transmitting the CELL UPDATE CONFIRM message to the wireless device.

- [c4] 4. A wireless system comprising a first wireless device, the first wireless device comprising a first central processing unit (CPU) electrically connected to a first memory, the first memory containing first program code executable by the first CPU, the first program code causing the first CPU to perform the following steps:
determining if the first wireless device is in a CELL_DCH state;
determining if a layer one radio link failure has occurred;
in response to determining that the first wireless device is in the CELL_DCH state and that radio link failure has occurred, performing radio access bearer (RAB) release steps to release radio bearers; and
in response to determining that the first wireless device is in the CELL_DCH state and that radio link failure has not occurred, not performing the RAB release steps.
- [c5] 5. The wireless system of claim 4 wherein the first program code further causes the first wireless device to initiate a Cell Update procedure.

[c6] 6. The wireless system of claim 5 further comprising a second wireless device, the second wireless device comprising a second CPU electrically connected to a second memory, the second memory containing second program code executable by the second CPU, the second program code causing the second CPU to perform the following steps:

receiving a CELL UPDATE message from the first wireless device;

in response to receiving the CELL UPDATE message, composing a CELL UPDATE CONFIRM message comprising an information element (IE) "RLC re-establish indicator (RB2, RB3 and RB4)"; and

transmitting the CELL UPDATE CONFIRM message to the first wireless device.